

CLAIMS

1. A method of purifying an organic phosphoric ester characterized in that the purification is carried out by treating a
5 crude organic phosphoric ester with an epoxy compound and treating the treated organic phosphoric ester with an alkaline aqueous solution.
2. A method according to claim 1, wherein the epoxy
10 compound is propylene oxide or butylene oxide.
3. A method according to claim 1 or 2, wherein the ratio
15 between the crude organic phosphoric ester and the epoxy compound is 1:1 to 1:20 (molar ratio) based on an acid value of the crude organic phosphoric ester.
4. A method according to any one of claims 1 to 3, wherein
20 the treatment with the epoxy compound is carried out at 40 to 160°C.
5. A method according to any one of claims 1 to 4, wherein
25 the organic phosphoric ester that has been treated with the epoxy compound is treated with water or an acidic aqueous solution in advance of the treatment with the alkaline aqueous solution.

6. A method according to any one of claims 1 to 5, wherein the alkaline aqueous solution is an aqueous solution of an alkali metal carbonate.

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7. A method according to claim 6, wherein the aqueous solution of alkali metal carbonate is an aqueous solution of sodium carbonate.

8. A method according to any one of claims 1 to 7, wherein an amount of an alkali compound in the alkaline aqueous solution is 0.1 to 50 molar equivalent with respect to the acid value of the crude organic phosphoric ester which is not yet treated with the epoxy compound.

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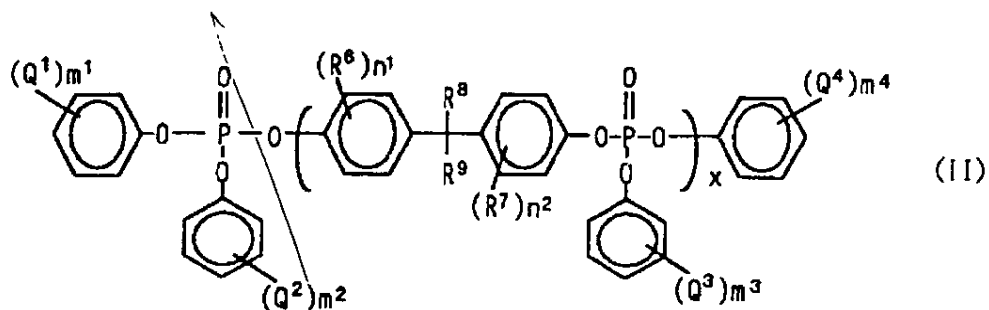
9. A method according to any one of claims 1 to 8, wherein a concentration of the alkaline aqueous solution is 0.01 to 10 wt%.

10. A method according to any one of claims 1 to 9, wherein the treatment with the alkaline aqueous solution is carried out at 60 to 120°C.

11. A method according to any one of claims 1 to 10, wherein the organic phosphoric ester is a compound represented

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by the general formula (II):



wherein Q^1 , Q^2 , Q^3 and Q^4 , the same or different, are an alkyl group having a carbon number of 1 to 6, R^6 , R^7 , R^8 and R^9 are methyl groups, m^1 , m^2 , m^3 and m^4 , the same or different, are an integer of 1 to 3, n^1 and n^2 , the same or different, are an integer of 0 to 2, and x is an integer of 0 to 5.

12. A method according to any one of claims 1 to 11,
 10 wherein the crude organic phosphoric ester is dehydrated in advance of the treatment with the epoxy compound.
13. A method according to any one of claims 1 to 12,
 wherein the organic phosphoric ester that has been treated with
 15 the alkaline aqueous solution is washed with water and subjected to steam distillation.